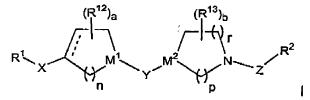
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## **AMENDMENTS**

1. (currently amended) A compound represented by the structural formula



or a pharmaceutically acceptable salt or solvate thereof, wherein:

a is 0 to 3;

b is 0 to 3;

n is [[1]] 2 [[or 3]];

p is 1, 2 or 3;

r is 0, 1, <u>or</u> 2[[, or 3]];

X is a bond or C<sub>1</sub>-C<sub>6</sub> alkylene;

M1 is [[CH or]] N;

 $M^2$  is  $C(R^3)$  [[or N]];

with the provises that when  $M^2$  is N, p is not 1;—and that when r is 0,  $M^2$  is  $C(\mathbb{R}^3)$ ; and provise that the sum of p and r is [[1 to 4]] 3

Y is -C(=O)-, -C(=S)-,  $-(CH_2)_{q^-}$ ,  $-NR^4C(=O)$ -,  $-C(=O)NR^4$ -,  $-C(=O)CH_2$ -,

-SO<sub>1-2</sub>-, or -C(=N-CN)-NH- or -NH-C(=N-CN)-; with the previses that when  $M^4$  is N, Y is not -NR $^4$ C(=O)- or -NH-C(=N-CN)-; and when  $M^2$  is N, Y is not -C(=O)-NR $^4$ - or -C(=N-CN)-NH-;

q is 1 to 5<del>, provided that when M<sup>1</sup> and M<sup>2</sup> are both N, q is not 1</del>;

Z is a bond,  $C_1$ - $C_6$  alkylene,  $C_2$ - $C_6$  alkenylene, -C(=O)-, -CH(CN)- or -CH<sub>2</sub>C(=O)NR<sup>4</sup>-;

R<sup>1</sup> is

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Q is -N(R8)- ,-S-or-Q-;

k is 0, 1, 2, 3 or 4;

k1 is 0, 1, 2 or 3;

k2 is 0, 1 or 2;

the dotted line represents an optional double bond;

R and R<sup>7</sup> are independently selected from the group consisting of H, C<sub>1</sub>-C<sub>6</sub> alkyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl-, C<sub>1</sub>-C<sub>6</sub> alkoxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-(C<sub>1</sub>-C<sub>6</sub>)alkyl-, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)alkoxy-, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-, R<sup>32</sup>-aryl-, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-, R<sup>32</sup>-aryl-, R<sup>32</sup>-aryl-, R<sup>32</sup>-aryl-, R<sup>32</sup>-aryl-, R<sup>32</sup>-aryl-, R<sup>32</sup>-aryl-, R<sup>32</sup>-aryloxy, R<sup>32</sup>-heteroaryl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl-, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl-oxy-, R<sup>37</sup>-heterocyclo-alkyl-, N(R<sup>30</sup>)(R<sup>31</sup>)-, N(R<sup>30</sup>)(R<sup>31</sup>)-, NH-(C<sub>1</sub>-C<sub>6</sub>)alkyl-O-(C<sub>1</sub>-C<sub>6</sub>)alkyl-, NHC(O)NH(R<sup>29</sup>); R<sup>22</sup>-S(O)<sub>0-2</sub>-, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl-S(O)<sub>0-2</sub>-, N(R<sup>30</sup>)(R<sup>31</sup>)-(C<sub>1</sub>-C<sub>6</sub>)alkyl-S(O)<sub>0-2</sub>-, benzoyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-carbonyl, R<sup>37</sup>-heterocycloalkyl-N(R<sup>29</sup>)-C(O)-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-N(R<sup>29</sup>)-C(O)-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-N(C<sub>1</sub>-C<sub>6</sub> alkoxy)-C(O)-, -C(=NOR<sup>36</sup>)R<sup>36</sup> and -NHC(O)R<sup>29</sup>; and when the optional double bond is not present, R<sup>7</sup> can be OH;

 $R^{8} \text{ is H, C}_{1}\text{-}C_{6} \text{ alkyl, halo}(C_{1}\text{-}C_{6}) \text{alkyl-, } (C_{1}\text{-}C_{6}) \text{alkoxy-}(C_{2}\text{-}C_{8}) \text{alkyl-, } R^{32}\text{-aryl}(C_{1}\text{-}C_{6}) \text{alkyl-, } R^{32}\text{-aryl, } R^{32}\text{-heteroaryl, } R^{32}\text{-heteroaryl}(C_{1}\text{-}C_{6}) \text{alkyl-, } (C_{3}\text{-}C_{6}) \text{cycloalkyl, } (C_{3}\text{-}C_{6}) \text{cycloalkyl-}(C_{1}\text{-}C_{6}) \text{alkyl, } R^{37}\text{-heterocycloalkyl, } R^{37}\text{-heterocycloalkyl-}(C_{1}\text{-}C_{6}) \text{alkyl-, } R^{22}\text{-so}(O)_{2}\text{-, halo}(C_{1}\text{-}C_{6}) \text{alkyl-so}(O)_{2}\text{-, } R^{22}\text{-so}(O)_{0}\text{-1-}(C_{2}\text{-}C_{6}) \text{alkyl-, } (C_{1}\text{-}C_{6}) \text{alkyl-} R^{29}\text{-so}_{2}\text{-, or } R^{32}\text{-heteroaryl-so}_{2};$ 

R<sup>2</sup> is a six-membered heteroaryl ring having 1 or 2 heteroatoms independently selected from N or N-O, with the remaining ring atoms being carbon; a five-membered heteroaryl ring having 1, 2, 3 or 4 heteroatoms independently selected from N, O or S, with the remaining ring atoms being carbon; R<sup>32</sup>-quinolyl; R<sup>32</sup>-aryl;

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or heterocycloalkyl; wherein said six-membered heteroaryl ring or said fivemembered heteroaryl ring is optionally substituted by R<sup>6</sup>;

 $R^3$  is H, halogen,  $C_1$ - $C_6$  alkyl, -OH or  $(C_1$ - $C_6)$ alkoxy;

 $R^4$  is independently selected from the group consisting of hydrogen,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_6$  cycloalkyl,  $(C_3$ - $C_6)$ cycloalkyl( $C_1$ - $C_6$ )alkyl,  $R^{33}$ -aryl,  $R^{33}$ -aryl( $C_1$ - $C_6$ )alkyl, and  $R^{32}$ -heteroaryl;

 $R^5$  is hydrogen,  $C_1$ - $C_6$  alkyl,  $-C(O)R^{20}$ ,  $-C(O)_2R^{20}$ ,  $-C(O)N(R^{20})_2$ ,  $R^{33}$ -aryl( $C_1$ - $C_6$ )alkyl- $SO_2$ -;

 $R^6$  is 1 to 3 substituents independently selected from the group consisting of -OH, halogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkoxy, -CF<sub>3</sub>, -NR<sup>4</sup>R<sup>5</sup>, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-NR<sup>4</sup>R<sup>5</sup>, phenyl,  $R^{33}$ -phenyl,  $NO_2$ , -CO<sub>2</sub>R<sup>4</sup>, -CON(R<sup>4</sup>)<sub>2</sub>, -NHC(O)N(R<sup>4</sup>)<sub>2</sub>,  $R^{32}$ -heteroaryl-SO<sub>2</sub>-NH-,  $R^{32}$ -aryl-(C<sub>1</sub>-C<sub>6</sub>)alkyl-NH-,  $R^{32}$ -heteroaryl-NH-,  $R^{32}$ -heterocycloalkyl-N(R<sup>29</sup>)-C(O)-NH-,  $R^{37}$ -heterocycloalkyl-N(R<sup>29</sup>)-C(O)-NH-:

 $R^{12}$  is independently selected from the group consisting of  $C_1$ - $C_6$  alkyl, hydroxyl,  $C_1$ - $C_6$  alkoxy, or fluoro, provided that when  $R^{12}$  is hydroxy or fluoro, then  $R^{12}$  is not bound to a carbon adjacent to a nitrogen; or  $R^{12}$  forms a  $C_1$  to  $C_2$  alkyl bridge from one ring carbon to another ring carbon;

 $R^{13}$  is independently selected from the group consisting of  $C_1$ - $C_6$  alkyl, hydroxyl,  $C_1$ - $C_6$  alkoxy, or fluoro, provided that when  $R^{13}$  is hydroxy or fluoro then  $R^{13}$  is not bound to a carbon adjacent to a nitrogen; or forms a  $C_1$  to  $C_2$  alkyl bridge from one ring carbon to another ring carbon; or  $R^{13}$  is =0:

 $R^{20}$  is independently selected from the group consisting of hydrogen,  $C_1$ - $C_6$  alkyl, or aryl, wherein said aryl group is optionally substituted with from 1 to 3 groups independently selected from halogen, - $CF_3$ , - $OCF_3$ , hydroxyl, or methoxy; or when two  $R^{20}$  groups are present, said two  $R^{20}$  groups taken together with the nitrogen to which they are bound can form a five or six membered heterocyclic ring;

 $R^{22}$  is  $C_1$ - $C_6$  alkyl,  $R^{34}$ -aryl or heterocycloalkyl;

R<sup>24</sup> is H, C<sub>1</sub>-C<sub>6</sub> alkyl, -SO<sub>2</sub>R<sup>22</sup> or R<sup>34</sup>-aryl;

 $\mathsf{R}^{25}$  is independently selected from the group consisting of  $\mathsf{C}_1\text{-}\mathsf{C}_6$  alkyl, halogen, CN, --CF3, -OH, C1-C6 alkoxy, (C1-C6)alkyl-C(O)-, aryl-C(O)-, N(R4)(R5)-C(O)-, N(R4)(R5)-S(O)1-2-, halo-(C1-C6)alkyl- or halo-(C1-C6)alkoxy-(C1-C6)alkyl-;  $\mathsf{R}^{29}$  is H, C1-C6 alkyl,  $\mathsf{R}^{35}$ -aryl or  $\mathsf{R}^{35}$ -aryl(C1-C6)alkyl-;  $\mathsf{R}^{30}$  is H, C1-C6 alkyl-,  $\mathsf{R}^{35}$ -aryl or  $\mathsf{R}^{35}$ -aryl(C1-C6)alkyl-;  $\mathsf{R}^{31}$  is H, C1-C6 alkyl-,  $\mathsf{R}^{35}$ -aryl,  $\mathsf{R}^{35}$ -aryl(C1-C6)alkyl-, (C1-C6)alkyl-C(O)-,  $\mathsf{R}^{35}$ -aryl-C(O)-, N(R4)(R5)-C(O)-, (C1-C6)alkyl-S(O)2- or  $\mathsf{R}^{35}$ -aryl-S(O)2-; or  $\mathsf{R}^{30}$  and  $\mathsf{R}^{31}$  together are -(CH2)4-5-, -(CH2)2-O-(CH2)2- or -(CH2)2-N(R29)-(CH2)2- and form a ring with the nitrogen to which they are attached;  $\mathsf{R}^{32}$  is 1 to 3 substituents independently selected from the group consisting of H, -OH, halogen, C1-C6 alkyl, C1-C6 alkoxy,  $\mathsf{R}^{35}$ -aryl-O-, -SR22, -CF3, -OCF3, -OCH52, -NR4R5, phenyl,  $\mathsf{R}^{33}$ -phenyl, -NO2, -CO2R4, -CON(R4)2, -S(O)2R22, -S(O)2N(R20)2, -N(R24)S(O)2R22, -CN, hydroxy-(C1-C6)alkyl-, -OCH2CH2OR22, and  $\mathsf{R}^{35}$ -aryl(C1-C6)-alkyl-O-, wherein said aryl group is optionally substituted with 1 to 3 independently selected halogens;

 $R^{33}$  is 1 to 3 substituents independently selected from the group consisting of  $C_1$ - $C_6$  alkyl, halogen, -CN, -NO<sub>2</sub>, -OCHF<sub>2</sub> and -O-( $C_1$ - $C_6$ )alkyl;

 $R^{34}$  is 1 to 3 substituents independently selected from the group consisting of H, halogen, -CF<sub>3</sub>, -OCF<sub>3</sub>, -OH and -OCH<sub>3</sub>.

 $R^{35}$  is 1 to 3 substituents independently selected from the group consisting of hydrogen, halo,  $C_1$ - $C_6$  alkyl, hydroxy,  $C_1$ - $C_6$  alkoxy, phenoxy, -CF<sub>3</sub>, -N( $R^{36}$ )<sub>2</sub>, -COOR<sup>20</sup> and -NO<sub>2</sub>;

 $R^{36}$  is independently selected from the group consisting of H and  $C_1\text{--}C_6$  alkyl; and

 $R^{37}$  is independently selected from the group consisting of H,  $C_1\text{-}C_6$  alkyl and  $(C_1\text{-}C_6)$  alkoxycarbonyl.

- 2. (currently amended) A compound of claim 1 wherein  $M^4$  is N, a is 0, n is 2, and the optional double bond in the ring containing  $M^4$  is not present.
- 3. (original) A compound of claim 1 wherein  $M^2$  is  $C(R^3)$  wherein  $R^3$  is hydrogen or halogen, b is 0; r is 1 and p is 2.
- 4. (original) A compound of claim 1 wherein Y is -C(0)-.

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- 5. (original) A compound of claim 1 wherein Z is straight or branched C<sub>1</sub>-C<sub>3</sub> alkyl.
- 6. (original) A compound of claim 1 wherein  $R^2$  is a six-membered heteroaryl ring, optionally substituted with one  $R^6$  substituent.
- 7. (original) A compound of claim 6 wherein  $\mathbb{R}^2$  is pyridyl, pyrimidyl or pyridazinyl, optionally substituted with  $-\mathbb{NH}_2$ .
- 8. (original) A compound of claim 1 wherein R<sup>1</sup> is

$$R^{8}-N$$
  $\xi$   $R^{7}-N-\xi$  or  $(R^{25})_{k}$ 

- 9. (original) A compound of claim 8 wherein R is H, alkyl,  $R^{32}$ -aryl,  $R^{32}$ -heteroaryl,  $(C_1-C_6)$ alkoxy-carbonyl or  $(C_1-C_6)$ alkyl- $N(R^{29})$ -C(O)-.
- 10. (original) A compound of claim 9 wherein R is R<sup>32</sup>-phenyl or R<sup>32</sup>-pyridyl.
- 11. (original) A compound of claim 8 wherein R<sup>7</sup> is hydrogen.
- 12. (original) A compound of claim 8 wherein  $R^8$  is H,  $R^{32}$ -aryl( $C_1$ - $C_6$ )alkyl-,  $R^{32}$ -heteroaryl( $C_1$ - $C_6$ )alkyl-,  $R^{32}$ -heteroaryl, ( $C_1$ - $C_6$ )alkyl-N( $R^{29}$ )-SO<sub>2</sub>- or  $R^{37}$ -heterocycloalkyl( $C_1$ - $C_6$ )alkyl-.
- 13. (original) A compound of claim 12 wherein  $R^8$  is H,  $R^{32}$ -benzyl,  $R^{32}$ -pyridylmethyl, piperidinoethyl or  $(C_1-C_6)$ alkyl-N( $R^{29}$ )-SO<sub>2</sub>- wherein  $R^{29}$  is H or  $C_1-C_6$  alkyl.
- 14. (original) A compound of claim 8 wherein  $R^{25}$  is H, halogen or  $-CF_3$  and k is 0 or 1.
- 15. (original) A compound of claim 1 selected from the group consisting of compounds of the formula

wherein R,  $R^8$ ,  $R^{25}$  and  $R^2$  are as defined in the table:

wherein K, K, and K are as defined in the table:			
R	R <sup>B</sup>	R <sup>25</sup>	R <sup>2</sup>
	(CH₃)₂N-SO₂-	Н	NH <sub>2</sub>
	N N	Н	NH <sub>2</sub>
CH <sub>3</sub> CH <sub>2</sub> -O-C(O)-	н	Н	N NH <sub>2</sub>
CH₃-NH-C(O)-	Н	н	N NH <sub>2</sub>
N September 1	Н	Н	NH <sub>2</sub>
	Н	F	N NH <sub>2</sub>
	\_N	Н	N NH <sub>2</sub>
₹ N	N	н	N NH <sub>2</sub>

- 16. (original) A pharmaceutical composition comprising an effective amount of a compound of claim 1 and a pharmaceutically effective carrier.
- 17. (currently amended) A method of treating: allergy, allergy-induced airway responses, congestion, hypotension, cardiovascular disease, diseases of the GI tract, hyper and hype metility and acidic-secretion of the gastro intestinal tract, obesity, sleeping disorders, disturbances of the central nervous system, attention deficit hyperactivity disorder, hype-and-hyperactivity of the central nervous system,

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Alzheimer's disease, schizophrenia, and migraine comprising administering to a patient in need of such treatment an effective amount of a compound of claim 1.

- 18. (canceled)
- 19. (canceled)
- 20 to 24. (canceled)